

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Presently Amended) A method of forming a fine pattern, comprising the steps of:
- forming a silicon-oxide-based film over a substrate by using an oxidizing gas containing nitrogen as a material gas, ~~wherein the silicon-oxide-based film is formed at a temperature of 500°C or more by means of a plasma CVD technique;~~
- forming a chemically-amplified photoresist layer on the silicon-oxide-based film;
- and
- transferring a mask pattern onto the chemically-amplified photoresist layer upon exposure through a mask;
- wherein, in the step of forming the silicon-oxide-based film, a nitrogen content of the surface of the silicon-oxide-based film is made to about a non-zero value of 0.1 atm-% or less.
2. (Canceled)
3. (Presently Amended) The method of forming a fine pattern according to claim 1, wherein a step of exposing a surface of the silicon-oxide-based film to plasma atmosphere of O₂ or N₂O is added between the step of forming ~~depositing~~ the silicon-oxide-based film and the step of forming the chemically-amplified photoresist layer.
4. (Canceled)
5. (Presently Amended) A method of manufacturing a semiconductor device, comprising the steps of:
- forming a silicon-oxide-based film over an underlying layer, wherein the silicon-oxide-based film is formed ~~at a temperature of 500°C or more by means of a plasma CVD technique~~ by using an oxidizing gas containing nitrogen as a material gas such that

a surface of the silicon-oxide-based film has a non-zero nitrogen content of 0.1 atm-% or less;

forming a chemically-amplified photoresist layer on the silicon-oxide-based film;

transferring a mask pattern onto the chemically-amplified photoresist layer upon exposure through a mask; and

etching the underlying layer by way of a resist pattern, to thereby form a fine pattern in the underlying layer.

6. (New) The method of forming a fine pattern according to claim 1, wherein the silicon-oxide-based film is deposited at a temperature of 400°C or more by means of a plasma CVD technique.

7. (New) The method of forming a fine pattern according to claim 1, wherein the silicon-oxide-based film is formed by using N₂O or NO as the oxidizing gas containing nitrogen.
